

## Safe Handling of Empty Containers

The dangerous waste regulations<sup>1</sup> describe a container as “any [movable] device in which a material is stored, transported, treated, disposed of, or otherwise handled.” This may include cans, bottles, jars, drums, barrels, bags, liners, inner liners, and large containers mounted on a truck or rail car.

Containers that once held dangerous waste can be handled as non-dangerous solid waste if they fit the definition<sup>2</sup> of “empty containers.”

### When is a Container “Empty?”

The Washington State Department of Ecology (Ecology) recognizes that it can be difficult to remove all contents of a container. A container is considered “empty” when all contents have been removed by normal, no-nonsense means, such as inverting and draining, shaking, scraping, or scooping, and it meets the following conditions.

- Small containers (less than 110 gallons), are empty when no more than one inch or three percent of the container’s volume remains.
- Large containers (greater than 110 gallons), are empty when no more than 0.3 percent of container volume remains.
- Containers holding compressed gases (such as aerosol cans) are empty when the pressure inside the container is equal or nearly equal to atmospheric pressure.

### Storing Empty Containers

Store your empty containers in an area protected from the weather. Rain and melted snow can collect inside a container you thought was empty and create a large volume of potentially dangerous waste. If stored upright, make sure the container is covered, bungs are tightly in place, all labels are removed and the container is marked, “Empty.” It is also a good idea to add the name of the product last stored in the container and the date it was emptied.

### Why it Matters

Dangerous waste left in containers can cause problems. Improperly emptied containers pose a contamination threat to property, transport vehicles, and workers.

Handle all containers, even technically “empty” ones, according to the dangerous waste rules. For example, keep containers with dangerous waste residue closed. If not, rain can mix with the residues and create a greater hazard and bigger disposal headache.

Containers sent to recycling and reconditioning facilities will spread contamination there if not properly emptied.

Ecology’s Hazardous Waste and Toxics Reduction Program works to help businesses reduce their use of toxic chemicals and ensure that businesses handle, store, and dispose of dangerous wastes safely.

### For more Information

Visit Ecology’s website at [www.ecy.wa.gov/programs/hwtr/manage\\_waste/containers.html](http://www.ecy.wa.gov/programs/hwtr/manage_waste/containers.html)

### Contact

If you have questions, contact a dangerous waste specialist at your local Ecology Regional Office, <http://www.ecy.wa.gov/contact.html>.

### Special Accommodations

*If you need this in a format for the visually impaired, call 360-407-6700. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.*

<sup>1</sup> Chapter 173-303 Washington Administrative Code (WAC)

<sup>2</sup> Chapter 173-303-040 WAC

## Proper Disposal Methods

Remove all free product and keep rinse water to a minimum. Materials like solvents, pesticides, and oil-based paints mixed with rinse water need to be designated and disposed of according to local, state, and federal regulations. Containers which held acutely hazardous waste or toxic extremely dangerous waste must be triple rinsed before they are disposed, reused, or recycled. Containers that held pesticides often need to be triple rinsed also. Do not dump product or rinse water on the ground or down the drain.

If on-site recycling is not an option and your larger metal containers are completely empty, they may be recycled through a drum-reconditioning firm. The [Industrial Materials Exchange](#) (IMEX) often lists exchanges for empty containers. IMEX matches up waste generators with waste users. If you have at least one hundred barrels, some companies will schedule a pickup if a driver is making a delivery in the area. The other option is to send the barrels overland by common carrier. Some drum-reconditioning firms prefer this while others require it. The barrels must be empty, with lids off but included, and must follow federal Environmental Protection Agency and Material Safety Data Sheet guidelines for shipment.

Scrap metal dealers may also take metal drums. Check the yellow pages in your local telephone directory under Scrap Metal–Process and Recycle for a list of dealers. The online [Hazardous Waste Services Directory](#) also lists companies willing to take drums.

Most local permitted solid waste landfills also take empty containers. Contact the landfill first to see if they will accept the containers and ask for any requirements they might have.

## Container Shipping Rules

U.S. Department of Transportation (DOT) regulations apply whenever you transport hazardous materials. However unused containers, cleaned, or with minimal residue, may be exempt from federal rules under certain conditions. For details, refer to the federal DOT regulations found in [Title 49 of the Code of Federal Regulations](#), parts 171 through 180.

## Fire Codes

In 1991, the Uniform Fire Code defined an empty container as being free from any residual hazardous materials or vapors. Check with your local fire department or fire district for any additional requirements, such as for containers previously used for storing flammable and combustible liquids.

For more information on handling dangerous waste containers safely, visit Ecology's website at [www.ecy.wa.gov/programs/hwtr/manage\\_waste/containers.html](http://www.ecy.wa.gov/programs/hwtr/manage_waste/containers.html).

